Puget Sound Acquistion & Restoration Fund

Puget Sound Recovery Projects
Application Project Summary

TITLE:	Corps General Investigation of Skokomish support	**NUMBER:** 09-1668N	(Non-Capital)
		STATUS: Preapplication	
APPLICANT:	Mason Conservation Dist	**CONTACT:**	

COSTS:

RCO	$429,000	100 %
Local	$0	0 %
Total	$429,000	100 %

SPONSOR MATCH:

DESCRIPTION:

This request for additonal support is directed to the combined sponsorship of the Army Corp of Engineers General Investigation of the Skokomish River. Both the Skokomish Indian Tribe and Mason County have a cost-share agreeement to contribute resources totaling the committment from federal resources for an investigation that has ultimate benefits to the Puget Sound basin from its sub-basin of the Skokomish River. Due to anticipated flow regime changes from the FERC Project #460, Tacoma's Cushman Hydroelectric Project, along with certain basin innovations in ownership, technologies and restoration opportunities, such watershed benefits effect the Hood Canal drainage, an glacially-carved fjord of Puget Sound. This project helps support overall Puget Sound Partnership goals and objectives.

LOCATION INFORMATION:

COUNTY:

SALMON INFORMATION: (* indicates primary)

Species Targeted

- Bull Trout
- Chinook
- Chum
- Coho
- Pink
- Searun Cutthroat
- Sockeye
- Steelhead

Habitat Factors Addressed

- Biological Processes
- Channel Conditions
- Floodplain Conditions
- Loss of Access to Spawning and Rearing Habitat
- Riparian Conditions
- Streambed Sediment Conditions
- Water Quality
- Water Quantity

LAST UPDATED:	June 23, 2009	**DATE PRINTED:**	June 25, 2009

PROJECT PROPOSAL – RESTORATION, ACQUISITION, AND COMBINATION RESTORATION/ACQUISITION PROJECTS

INSTRUCTIONS: Salmon Recovery Funding Board applicants must respond to the following items. Please respond to each question individually -- do not summarize your answers collectively in essay format). Local citizen and technical advisory groups will use this information to evaluate your project. Contact your lead entity for additional information that may be required. Limit your response to eight pages.

Submit information via the PRISM attachment process. Application checklists and attachment forms may be downloaded off the SRFB Web site at http://www.rco.wa.gov/srfb/docs.htm.

NOTE: Acquisition, Combination, Fish Passage, and Diversions and Screening projects have supplemental questions embedded within this worksheet. Please answer the questions below and all pertinent supplemental questions.

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1) PROJECT OVERVIEW

Explain your project overall and include the following elements:

a) List your primary project objectives, such as how this project will improve or maintain habitat conditions and habitat forming processes.

***Acquisition*: Protect a forested riparian buffer, a steep slope, a floodplain, or a channel migration zone; extinguish development rights.**
***Upland*: Reduce erosion and sedimentation; accomplish bank stabilization; restore native vegetation.**
***Riparian*: Increase shade; provide a source of woody debris recruitment; accomplish bank stabilization.**
***In-stream Habitat*: Increase channel complexity; provide cover; capture sediment; reduce erosion; create pools; reconnect side-channels or floodplain.**
***Fish Passage:* Provide passage for resident and anadromous fish; improve large wood and sediment conveyance; restore natural stream function.**

b) State the nature, source, and extent of the problem that the project will address, including the primary causes of the problem, not just the symptoms. Explain how achieving the project objectives will help solve the problem. (Fish Passage projects and Diversions and Screening projects should refer to the supplemental questions later in this worksheet for further guidance on information to include in their problem statement.)

This project involves the SUPPORT and PASS-THROUGH if SRFBD funds to the Army Corps of Engineers for a Skokomish River General Investigation. Certain

habitat enhancement opportunities along with fish passage assistance within the Skokomish River and tributary floodplains will be investigated.

These assessments, designs and enhancement / restoration opportunities will allow additional protection to be afforded to the ESA-listed stocks as well as other salmonid stocks of the Skokomish watershed, along with identifying flood relief measures. The GENERAL INVESTIGATION is expected to have positive effects by protecting off-channel and migratory aspects of varied salmon life history behaviors including spawning, rearing, over-wintering and summer refuge, by enhancing refugia subjected to low-flow conditions. In addition will be the complementary aspect of flood attenuation.

c) Describe the fish resources (species and life history stages present, unique populations), the habitat conditions, and other current and historic factors important to understanding this project. Be specific--avoid general statements. Which salmonid species and life cycle stage(s) are targeted to benefit by this project?

The fish resources include Hood Canal summer Chum (*Oncorhynchus keta*), Puget Sound Chinook (*O. twayshca)*, coastal steelhead *(O. mykiss)* and coastal bull trout *(Salvelinus confluentus),* all ESA- listed salmons stocks with 'threatened' status. Other salmon species include cutthroat (*O. clarkii),* silver or coho salmon *(O. kisutch),* pink *(O. gorbuscha)* and sockeye *(O. nerka).* All life cycles of spawning, summer rearing, over-wintering and migration for above stocks are anticipated. The GENERAL INVESTIGATION and the subsequent design and construction implementation are anticipated to benefit multiple life history behaviors of all salmonids and specific stocks as well as address water quality issues once the barriers are removed. Back-water and off-channel opportunities are to be enhanced as well as sheet flow surface waters attenuated.

d) Discuss how this project fits within your regional recovery plan or local lead entity strategy (i.e., does the project address a priority action, occur in a priority area, or target priority fish species?).

Hood Canal Summer Chum Plan and the Skokomish River Chinook Recovery Plan have both identified protection of landscapes as refuge as critical, as well as implementing enhancement and restoration efforts in off-channel habitats. These design and restoration activities are in a Tier-1 watershed that is benefitting from newly restored stream flows and target ESA-listed salmonids, within a landscape where better landowner relationships are prospering. Bureau of Reclamation studies recently released show channel migration studies. The Skokomish Indian Tribe and the WDFW have co-produced a Skokomish River Chinook Recovery Plan. There are new flows being released from Tacoma Power's Cushman Project #460 into the North Fork as of March 2008 and more increased flows anticipated.

e) Has any part of this project been previously reviewed and/or funded by the Salmon Recovery Funding Board? If yes, please provide the project name and SRFB project number (or year of application if a project number is not available). If the project was later withdrawn for funding consideration or was not awarded SRFB funding, please describe how the current proposal differs from the original.

Yes, there have been earlier iterations submitted and the projects funds were transferred to the Army Corps of Engineers for their expanded Project Management Plan that would include the North Fork floodplain within the Corps General Investigation of the Skokomish River.

This proposal differs in that the support is for Mason County's share of the project for fiscal year 2010. This additional support will provide pass-through to the Corps for their investigations.

When possible, list your sources of information by citing specific studies, reports, and other documents.

2) PROJECT DESIGN

a) Describe the location of the project in the watershed, including the name of the water body(ies), upper and lower extent of the project (if only a portion of the watershed is targeted), and whether the project occurs in the nearshore, estuary, main stem, tributary, off channel, or other location.

The landscapes identified for assessment, investigation, enhancement are the floodplains of the lower North Fork Skokomish River, the South Fork Skokomish River and the mainstem Skokomish river to the river mouth at the estuary of Hood Canal.

Other engineering associated with an engineered crib-wall west of the ponds.

Describe the project design and how it will be implemented. Describe the extent of the project. Describe specific restoration methods and design elements you plan to employ. If restoration will occur in phases, explain individual sequencing steps, and which of these steps is included in this application. (Acquisition-only projects need not respond to this question.)

The Army Corp of Engineers has a Project Management Plan due to be revised with the co-sponsors of the Skokomish Indian Tribe and Mason County. The Army Corps has designed the Skokomish General Investigation and is available form other iterations and reporting.

b) Describe the scale and size of the project or `property(s) to be acquired, and its proximity to protected, functioning, or restored habitats. (Fish Passage only projects and Diversions and Screening only projects [i.e., not a combination] need not respond to this question.)

A higher level of ownership cooperation, site maintenance and other varied protective mechanisms for water quality are anticipated. The mainstem is enjoying increased flows from the Cushman project via the North Fork and its new channel and rive mouth. Portions of this project have some intact riparian characteristics. Portions of the project are being enrolled in either CREP or a floodplain easement program that allows for re-vegetating with native plants along with establishing fisheries accessibility for multiple life history behaviors along with refugia. Other complementary projects, products and watershed assessment are providing a sum greater than its constituent parts.

The project area is downstream of the Cushman hydroelectric project that has had flow increases since March 8 2008. More flows related to bedload movement and fisheries attraction is anticipated. These North Fork flows are expected to augment existing conditions. Adjacent properties are considered for a partial acquisition / conservation easement with appropriate boundary line adjustment.

c) Describe the long-term stewardship and maintenance obligations for the project or acquired land. For acquisition and combination projects, identify any planned use of the property, including upland areas.

This project lends itself to a cooperative and collaborative effort between the Mason Conservation District, the Army Corp, Mason County, Skokomish Tribe Skokomish Farms, Inc. among others. There has been support Skokomish Watershed Action Team (SWAT) for similar actions and activities. The properties are in the Tribe's treaty –defined usual and accustomed areas. Combined collaborative efforts exist between the Mason Conservation District, the Skokomish Indian Tribe, Mason County and the Wilderness Society through SWAT to address the restorative processes along with the social and contemporary opportunities.

Planned use is to maintain some of the landscapes in 'conservancy' while other properties are enrolled in easements, others dedicated to organic gardening and no-tillage pastures, and still others for s residential 'green' community with specific number of residences at the toe of the slope, upstream ¾ of a mile. Certain biological ecological and cultural aspects and opportunities will be incorporated, following a 'charter' in preparation by Skokomish Farms, Inc.

3) PROJECT DEVELOPMENT

a) List the individuals and methods used to identify the project and its location.

The individuals include varied staff with comprehensive institutional knowledge of the Skokomish watershed from the Mason Conservation District, Skokomish Indian Tribe, Mason County and Natural Resource Conservation Service. Methods utilized to assess, rank and investigate the property in a cursory fashion include technical work sessions, title searches, field visits when granted permission, investigations of salmonid utilization and other landscape assessments and other due diligence to

assure clear titles, ecological and cultural importance, and opportunities for environmental education and outreach. The Army Corps is responsible for overall project direction with the Skokomish Tribe and Mason County sharing a 50% investment.

b) Explain how the project's cost estimates were determined.

This design and construction project values have been cursorily determined by recent similar engineering and construction practices and activities elsewhere in the Army Corp's Project Management Plan.

c) Describe other approaches, opportunities, and design alternatives that were considered to achieve the project's objectives.

Other approaches through conservation easements, leveraging land trust, securing other federal support for floodplain, riparian and crop-retiring have all been investigated and in some cases implemented. Due to the breadth of these opportunities, along with an Army Corps of Engineers General Investigation currently taking place, the timing is ripe. This project is located primarily between the Skokomish Indian Reservation and the US Forest Service lands; there is an opportunity to address comprehensive basin-wide protective mechanisms and continuing the momentum of the existing Corps progress and process.

d) Describe the consequences of not conducting this project at this time. Consider the current level and imminence of risk to habitat in your discussion.

These General Investigation may be at risk to some entities with plans for certain developments that may be counter to long-term conservancy. This process is one way to help limit those actions, therefore being prudent and pro-active rather than reactive as a response to poor landscape decision. The Army Corps is moving forward and requires the continuing support of the Tribe and Mason County to continue the health momentum.

e) Describe any concerns about the project raised from the community, recreational user groups, or adjacent land owners, and how you addressed them.

These floodplain properties are being investigated and have a variety of ownership. located The goal is to address all the properties subject to flood flows that aslo have an ecological compromise from past practices. Certain properties recently transferred in ownership, thereby starting to reverse declining trends inappropriate landscape stewardship. Any types of interaction that may prove to have certain conflicts for various users need to be addressed in a forthright and transparent fashion. This can be done through the media, open houses at the Grange, direct mailings, within agendas of the various jurisdictions gathering at regularly scheduled meetings. In particular the Skokomish Watershed Action Team has been the vehicle for certain 'vetting' of projects, addressing concerns and

providing varied alternatives analysis and when necessary, mitigations. The landowners are willing to 'take on flood waters' to a certain degree which is contrary and a welcome respite from historical positions. The Army Corp of Engineers through its Project Management Plan will continue this critical project, through combined support from the Tribe Mason County and SRFBD.

f) Include a Partner Contribution Form, when required, from each partner outlining its role and contribution to the project. This form may be downloaded off the SRFB Web site. State agencies are required to have a local partner that is independently eligible to be a project sponsor. A Partner Contribution Form is also required from partners providing third-party match.

These will be provided during full-project development and subsequent submission.

g) List all landowner names. Include a signed Landowner Acknowledgement Form (available on the SRFB Web site) from each landowner acknowledging their property is proposed for SRFB funding consideration. If a restoration project covers a large area and encompasses numerous properties, Landowner Acknowledgement Forms are not required. For sponsors proposing work on their own property, this form is not required. For multi-site acquisition projects involving a relatively large group of landowners, include, at a minimum, signed Landowner Acknowledgement Forms for all known priority parcels.

These will be provided during full-project development and subsequent submission but include Skokomish Farms, Inc. (Alann and Mali Krivor).

h) Describe your experience managing this type of project. List the names, qualifications, roles, and responsibilities for all known staff, consultants, and subcontractors who will be implementing the project. If unknown, describe the selection process.

Certain individuals employed by the Mason Conservation District, the Skokomish Indian Tribe, and Mason County have a deep understanding of the habitat restoration and enhancement opportunities that mesh well with the acquisitions process with a primary emphasis on conservancy futures for sensitive landscapes. Very complex and long-developed projects have undergone the various steps of dissemination, narrative, advocacy, outreach and budget development, along with the fiscal tracking and budget recording. Salmon recovery and protection of water quality are opportunities for the watershed as wells as the drainage basin of Hood Canal. Certain selection processes, as appropriate, may be identified by

Request for Qualification (RFQ.) that state history, understanding, similar projects and references. The Army Corp is conducting much of its own study and contracting where appropriate.

4) TASKS AND SCHEDULE

List and describe the major tasks and time schedule you will use to complete the project.
CONSTRAINTS AND UNCERTAINTIES

The major tasks include assessing the various topographical, biological and ecological characteristics of the floodplains. Most critical are the existing elevation, channel depths relic channel opportunities. Various data base and title searches to support the Landowner Willingness Form… ALL performance of these tasks will follow SRFBD criteria, conditions milestones and reporting. Working closely with the SRFBD grants manager from the anticipated award date through milestone development and agreement signature and on through the acqusitions process will be critical. Transparent and open communication with and between all parties is a mandate for the successful implementation of this project, for each acquisition. There are opportunities for incorporating economies of scales and project efficiencies by addressing other elevation and topographic detail from proximal sites.

Each project should include an adaptive management approach that provides for contingency planning. State any constraints, uncertainties, possible problems, delays, or unanticipated expenses that may hinder completion of the project. Explain how you will address these issues as they arise and their likely impact on the project.

Full submissions will have done the appropriate due diligence to provide the Landowner Willingness to commit to pursuing a transaction. A scenario may allow for a commitment for dedication of resources and support restoration of this landscape with unique characteristics within the watershed. There can be delays due to liens preventing clear titles, hazardous waste or Underground Storage Tanks (UST), cultural landscape or artifacts known to be on –site or found, along with appropriate Section 106 processes, as well as Section 7 ESA consultations, among others.

Supplemental Questions

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5) PROJECTS INVOLVING ACQUISITIONS (Applies to both Acquisition-only and Combination Projects)– Answer the following questions

a) Describe the type of acquisition proposed (e.g., fee title, conservation easement).

b) Describe the habitat types on site (forested riparian/floodplain, wetlands, tributary, main stem, off-channel, bluff-backed beach, barrier beach, open coastal inlet, estuarine delta, pocket estuary, uplands, etc.), their size in acres, and

quality. If uplands are included, explain why they are essential for protecting salmonid habitat. Describe any features that make the site unique.

c) State the percentage of the total project area that is intact and fully functioning habitat.

d) Explain the degree to which habitat on site is impaired and the nature and extent of required restoration. If the property is in the channel migration zone, is that function intact (i.e., do existing levees, riprap, infrastructure, or other features on this or nearby properties inhibit channel migration)? Describe the likely prioritization, timeframe, and funding sources for proposed restoration activities.

e) List existing structures (home, barn, outbuildings, fence) on the property and any proposed modifications. Note: In general, buildings on SRFB-assisted acquisitions must be removed. Refer to Section 2 of SRFB Manual 18 for information about ineligible project elements.

f) Describe adjacent land uses (upstream, downstream, across stream, upland).

g) Describe why acquisition is needed. Explain why federal, state, and local regulations do not provide enough protection. State the zoning and Shoreline Master Plan designation.

h) If buying the land, explain why the acquisition of conservation easements to extinguish certain development, timber, agricultural, mineral, or water rights will not achieve the goals and objectives of the project.

i) For multi-site acquisition projects, identify all the possible parcels that will provide similar benefits and certainty of success and provide a clear description of how parcels will be prioritized and how priority parcels will be pursued for acquisition.

6) FISH PASSAGE PROJECTS -- Answer the following questions:

NOTE: For fish passage design and evaluation guidance, applicants should refer to the WDFW Fish Passage Barrier and Screening Assessment and Prioritization Manual at http://wdfw.wa.gov/hab/engineer/fishbarr.htm, and the Design of Road Culverts for Fish Passage manual at http://wdfw.wa.gov/hab/engineer/cm/. For prioritization questions or technical assistance, contact Dave Collins at Department of Fish and Wildlife at (360) 902-2556 or at david.collins@dfw.wa.gov. For engineering design questions or technical assistance, contact Michelle Cramer at (360) 902-2610 or crameмlc@dfw.wa.gov.

a) **Information to include in item 1b, PROBLEM STATEMENT:** Concisely describe the passage problem (outfall, velocity, slope, etc). Describe the current barrier (age, material, shape, and condition). Is the structure a complete or partial barrier? Describe the amount and quality of habitat to be opened if the barrier is corrected.

b)

c) **PROJECT DESIGN**

If a culvert is proposed, does it employ a stream simulation, no slope, hydraulic, or other design?

i) Has the project received a Priority Index (PI) Number? If so, provide the PI number and indicate the method used: Physical Survey, Reduced Sample Full Survey, Expanded Threshold Determination, or WDFW Generated PI (list source, such as a study or inventory). **NO**

ii) Identify if there are additional fish passage barriers downstream or upstream of this project.

Downstream of the project is the main (newly –formed) channel of the North Fork Skokomish River. Upstream are two other ponds that have surface connectivity.

iii) Complete and attach the Barrier Evaluation Form and Correction Analysis Form. These forms are available in Appendix P of SRFB Manual 18 and can be downloaded off the SRFB Web site at http://www.rco.wa.gov/srfb/docs.htm.

7) DIVERSIONS AND SCREENING PROJECTS -- Answer the following questions:

NOTE: For questions or technical assistance, contact Pat Schille, Department of Fish and Wildlife (WDFW) at (509) 575-2735 or schilpcs@dfw.wa.gov. Refer to the WDFW Fish Passage Barrier and Screening Assessment and Prioritization Manual (August 2000) at http://wdfw.wa.gov/hab/engineer/fishbarr.htm for further guidance.

a) **Information to include in item 1b, PROBLEM STATEMENT:** If the diversion is equipped with a fish screen, provide details of why it is not functioning properly from a fish protection perspective (entrainment or impingement).

b) **PROJECT DESIGN**

i) Has the project received a Screening Priority Index (SPI) Number? If yes, provide the SPI and indicate if the Washington Department of Fish and Wildlife (WDFW) developed the SPI.

ii) Is this a pump or gravity diversion?

iii) What is the flow of the diversion in gallons per minute (gpm)? How was the flow determined (water right; meter – system meter; calculated from irrigation system components, or direct measurement during peak spring/summer diversion using a flow meter)?

iv) If it is not possible to determine the flow, then provide the bank-full, cross-sectional area of the ditch, measured 100-300 feet downstream of the Point of Diversion. Refer to page 25 of the WDFW Fish Passage Barrier and Screening Assessment and Prioritization Manual for instructions on how to collect this information.

v) How much water, if any, will be saved as a result of this project? Will water be put into trust, or are there plans to transfer water rights?